AMENDMENT TO THE CLAIMS

1.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body comprises martensite phase prepared to have a solid soluble carbon concentration of 0.15 to 0.5wt% and contains carbide in a content of 5 to 50% by volume.

2.(Original) The sintered sliding member according to claim 1,

wherein said ferrous sintered sliding body is formed with at least one of closed pores and recesses at a sliding surface thereof in an area ratio of 1 to 10%.

3.(Original) The sintered sliding member according to claim 1,

wherein said ferrous sintered sliding material contains one or more elements selected from the group consisting of Cr of 9wt% or more, Mo of 3.5wt% or more, Mo and W in a total amount of 4.5wt% or more, and V of 3wt% or more so that said martensite phase contains one or more carbides selected from the group consisting of Cr_7C_3-type carbide, M_6C-type carbide, and MC-type carbide dispersed therein.

4.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body contains carbon of 0.9 to 3.8wt%, Cr of 9 to 35wt%, and V of 0 to 3wt%, in which a content of carbon satisfies the following equation: $0.143\times Cr(wt\%)-1.41+14\times$MC-type carbide (volume fraction) $\leqq$ Carbon (wt%) $\leqq$ $0.156\times Cr(wt\%)-0.58+14\times$MC-type carbide (volume fraction), and has martensite phase,

in which said martensite phase, forming a solid solution with carbon of 0.2 to 0.45wt% and Cr of 6.5 to 12wt%, contains Cr_7C_3-type carbide in a content of 5 to 40% by volume and MC-type carbide in a content of 5% or less by volume dispersed therein with a total content of said carbides being 5 to 40% by volume, and

wherein said ferrous sintered sliding body contains one or more elements selected from the group consisting of Si, Mn, Ni, P, S, B, N, Mo, W, Ti, Co, Cu and Al.

5.(Original) The sintered sliding member according to claim 4,

wherein said ferrous sintered sliding body contains at least one of Si of 1 to 3.5wt% and Al of 0.5 to 2wt%.

6.(Original) The sintered sliding member according to claim 5,

wherein a content of carbon in said ferrous sintered sliding body satisfies the following equation: $0.143\times Cr(wt\%)-1.41+0.15\times Si(wt\%)+14\times$MC-type carbide (volume fraction) $\leqq$ Carbon(wt%) $\leqq$ $0.156\times Cr(wt\%)-0.58+0.15\times Si(wt\%)+14\times$MC-type carbide (volume fraction),

wherein said ferrous sintered sliding body has martensite phase, said martensite phase forming a solid solution with carbon of 0.2 to 0.45wt%, Cr of 6.5 to 12wt% and at least one of Si of 1 to 5wt% and Al of 0.5 to 4wt%, and containing Mo or Mo and W in a total amount of 0 to $4.0-0.5\times(Si(wt\%)+Al(wt\%))$.

7.(Original) The sintered sliding member according to claim 4,

wherein said ferrous sintered sliding body contains either one of Mo of 1.6 to 6.5wt% or Mo and W in a total amount of 1.6 to 6.5wt%, and said martensite phase contains one or more elements selected from the group consisting of Mo of 1.5 to 4wt%, Mo and W in a

total amount of 1.5 to 4wt% and V of 0 to 0.6wt%.

8.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body contains carbon of 1.8 to 4.5wt%, Cr of 12 to 30wt%, V of 3.5 to 10wt% and either one of Mo of 2 to 6.4wt% or, Mo and W, in a total amount of 2 to 6.4wt%, and has martensite phase,

in which said martensite phase, forming a solid solution with carbon of 0.2 to 0.45wt%, Cr of 6.5 to 12wt% and further one or more elements selected from the group consisting of Mo of 1 to 3.5wt%, Mo and W in a total amount of 1 to 3.5wt% and V of 0.4 to 0.6wt%, contains Cr_7C_3-type carbide in a content of 10 to 35% by volume and MC-type carbide in a content of 5 to 15% by volume dispersed therein with a total content of said carbides being 15 to 40% by volume, and

wherein said ferrous sintered sliding body contains one or more elements selected from the group consisting of Si, Mn, Ni, P, S, B, N, Mo, W, Co, Cu and Al.

9.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body contains carbon of 0.6 to 1.9wt%, Cr of 1 to 7wt%, V of 0 to 3wt%, Mo of 3.5wt% or more and Mo+0.5×W of 4.5 to 30wt%, in which 0.5×W represents half of a real amount of W, and has martensite phase,

in which said martensite phase, having a solid soluble carbon concentration of 0.2 to 0.45wt%, contains M_6C-type carbide in a content of 5% or more by volume and MC-type carbide in a content of 5 to 40% by volume dispersed therein, and

wherein said ferrous sintered sliding body contains one or more elements selected

from the group consisting of Si, Mn, Ni, P, S, B, N, Ti, Co, Cu and Al.

10.(Original) The Sintered sliding member according to claim 9,

wherein a content of carbon in said ferrous sintered sliding body satisfies the following equation: $0.05\times(Mo(wt\%)+0.5\times W(wt\%))+14\times$MC-type carbide (volume fraction) $\leqq$ Carbon(wt%) $\leqq$ $0.038\times(Mo(wt\%)+0.5\times W(wt\%))+0.33+14\times$MC-type carbide (volume fraction).

11.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body contains carbon of 1.3 to 3wt%, Cr of 1 to 5wt%, V of 3 to 12wt%, Mo of 10wt% or more and, Mo and W, of 10 to 23wt% and has a structure in which martensite phase, having a solid soluble carbon concentration of 0.2 to 0.45wt%, contains M_6C-type carbide in a content of 15 to 35% by volume and MC-type carbide in a content of 5 to 15% by volume dispersed therein, and

wherein said ferrous sintered sliding body contains one or more elements selected from the group consisting of Si, Mn, Ni, P, S, B, N, Ti, Co, Cu and Al.

12.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body contains carbon of 0.8 to 3.4wt%, Cr of 9 to 28wt%, V of 0 to 5wt%, Mo of 5wt% or more and, Mo and W, of 5 to 18wt%, and has martensite phase,

in which said martensite phase, having a solid soluble carbon concentration of 0.2 to 0.45wt%, contains Cr_7C_3-type carbide in a content of 5 to 25% by volume, M_6C-type

carbide in a content of 5 to 25% by volume and MC-type carbide in a content of 0 to 5% by volume dispersed therein with a total content of said carbides being 10 to 40% by volume, and

wherein said ferrous sintered sliding body contains one or more elements selected from the group consisting of Si, Mn, Ni, P, S, B, N, Ti, Co, Cu and Al.

13.(Original) The sintered sliding member according to claim 12,

wherein a content of carbon in said ferrous sintered sliding body satisfies the following equation: $0.043\times(Mo(wt\%)+0.5\times W(wt\%))+8.5\times Cr_7C_3$-type carbide (volume fraction)$+14\times$MC-type carbide (volume fraction) $\leqq$ Carbon(wt%) $\leqq$ $0.038\times(Mo(wt\%)+0.5\times W(wt\%))+0.33+8.5\times Cr_7C_3$-type carbide (volume fraction)$+14\times$MC-type carbide (volume fraction).

14.(Original) A sintered sliding member comprising a back metal and a ferrous sintered sliding body which is combined to the back metal,

wherein said ferrous sintered sliding body contains carbon of 1.5 to 3.2wt%, Cr of 7 to 25wt%, Mo of 3.5wt% or more, Mo and W of 5 to 15wt% and at least either one of V or Ti in a total amount of 3 to 8wt%, and has martensite phase,

in which said martensite phase, having a solid soluble carbon concentration of 0.2 to 0.45wt%, contains Cr_7C_3-type carbide in a content of 5 to 20% by volume, M_6C-type carbide in a content of 5 to 20% by volume and MC-type carbide in a content of 5 to 15% by volume dispersed therein with a total content of said carbides being 15 to 50% by volume, and

wherein said ferrous sintered sliding body contains one or more elements selected from the group consisting of Si, Mn, Ni, P, S, B, N, Ti, Co, Cu and Al.

15.(Original) The sintered sliding member according to claim 1,

wherein a composition of said ferrous sintered sliding body is adjusted so as to contain one or more carbides selected from the group consisting of Cr_7C_3-type carbide, M_6C-type carbide and MC-type carbide, which are coarsened to have an average grain size of 40μm or more, dispersed and precipitated therein in a content of 3% or more by volume by adding Cr powder, Mo powder, W powder, V powder or ferrous alloy powder contained high alloying element.

16.(Original) The sintered sliding member according to claim 3,

wherein said ferrous sintered sliding body contains one or more elements selected from the group consisting of Ni of 1 to 5wt%, Mn of 1 to 2wt%, Co of 2 to 12wt% and Al of 0.2 to 1.5wt%.

17.(Original) The sintered sliding member according to claim 16,

wherein said martensite phase contains retained austenite phase dispersed therein in a content of 5 to 40% by volume.

18.(Original) The sintered sliding member according to claim 1,

wherein said ferrous sintered sliding body contains at least one of P of 0.1 to 1.5wt% and B of 0.01 to 0.2wt% so as to contain one or more compounds selected from the group consisting of Fe_3P, Cr_2P, FeMoP, V_2P, and FeTiP dispersed therein in a content of 10% or less by volume.

19.(Original) The sintered sliding member according to claim 1,

wherein said ferrous sintered sliding body contains Cu based alloy, containing one or more elements selected from the group consisting of P, Sn, Al, Fe, and Ni, dispersed therein in a granular form in a content of 1 to 10% by volume.

20.(Original) The sintered sliding member according to claim 18,

wherein said ferrous sintered sliding body contains at least one of Mo metal particles, W metal particles and graphite particles dispersed therein in a content of 1 to 10% by volume, in which said dispersed particles are surrounded with Cu or Cu alloy phase.

21.(Original) The sintered sliding member according to claim 3,

wherein said ferrous sintered sliding body is formed with closed pores scattered therein in a content of 1 to 10% by volume, said closed pore having an average size of 0.03 to 3.0mm.

22.(Original) The sintered sliding member according to claim 3,

wherein said ferrous sintered sliding body is formed with recesses scattered at a sliding surface thereof in an area ratio of 3 to 10%.

23.(Original) The sintered sliding member according to claim 1,

wherein said martensite phase comprises tempered martensite phase tempered at 150 to 600°C.

24.(Original) The sintered sliding member according to claim 1,

wherein said back metal comprises a cylindrical member and a collar formed at one

end surface of the cylindrical member, said collar having a sliding surface,

wherein said ferrous sintered sliding body having a thickness of 0.5mm or more is combined to said sliding surface.

25.(Original) The sintered sliding member according to claim 1,

wherein said ferrous sintered sliding body is formed into a doughnut shape and at least a part of an inner surface and an under surface thereof is sintering-bonded to said back metal,

in which a part of a bonded surface of said ferrous sintered sliding body and said back metal is formed with at least either one of ventholes or grooves through which gas generated from the ferrous sintered sliding body at sintering-bonding is discharged.

26.(Original) The sintered sliding member according to claim 3,

wherein said sintered sliding member is a thrust bearing, in which said ferrous sintered sliding body contains Cr_7C_3-type carbide, M_6C-type carbide and MC-type carbide dispersed therein in a total content of 5 to 25% by volume and said back metal has a hardness of Hv170 or more.

27.(Original) The sintered sliding member according to claim 3,

wherein said sintered sliding member is a thrust bearing, in which said ferrous sintered sliding body contains Cr_7C_3-type carbide, M_6C-type carbide and MC-type carbide dispersed therein in a total content of 5 to 25% by volume and is formed with at least either one of closed pores and recesses at a sliding surface thereof in an area ratio of 1 to 10%, and said back metal has a hardness of Hv170 or more.

28.(Currently Amended) The sintered sliding member according to claim 26 ~~or 27~~,

wherein said back metal comprises a cylindrical member and a collar at one end surface thereof, said collar having a sliding surface sliding under a thrust load,

wherein said ferrous sintered sliding body is sintering-bonded to the sliding surface of said collar and a bushing is fixedly mounted to an inner surface of said cylindrical member, said bushing being made of porous sintered material which retains lubricating oil or lubricating compound of lubricating oil and wax, filled therein.

29.(Original) The sintered sliding member according to claim 28,

wherein said porous sintered material is made of a material having the same property as said ferrous sintered sliding body.

30.(Original) The sintered sliding member according to claim 3,

wherein said sintered sliding member is a floating seal, in which said ferrous sintered sliding body contains Cr_7C_3-type carbide, M_6C-type carbide, and MC-type carbide dispersed therein in a total content of 20 to 40% by volume and said back metal has a hardness of Hv170 or more.

31.(Original) The sintered sliding member according to claim 3,

wherein said sintered sliding member is a floating seal, in which said ferrous sintered sliding body contains Cr_7C_3-type carbide, M_6C-type carbide and MC-type carbide dispersed therein in a total content of 20 to 40% by volume and is formed with at least either one of closed pores or recesses at a sliding surface thereof in an area ratio of 1 to 10%.

32.(Currently Amended) The sintered sliding member according to claim 30 ~~or 31~~,

wherein said ferrous sintered sliding body is formed with closed pores scattered therein in a content of 3 to 10% by volume, said closed pore having an average size of 0.03 to 1.0mm.

33.(Currently Amended) The sintered sliding member according to claim 30 ~~or 31~~,

wherein a seal surface of said floating seal is formed with recesses scattered therein in an area ratio of 3 to 10%, said recess having a depth of 1mm or less in a width direction of said seal surface.

34.(Currently Amended) The ferrous sintered sliding member according to claim 30 ~~or 31~~,

wherein said martensite phase contains retained austenite dispersed therein in a content of 5 to 40% by volume.

35.(Currently Amended) A connecting device comprising:

a bearing made of a sintered sliding member according to claim 26 ~~or 27~~ comprising a back metal and a ferrous sintered sliding body which is combined to the back metal, in which said ferrous sintered sliding body has martensite phase, having a solid soluble carbon concentration of 0.15 to 0.5wt%, and contains carbide in a content of 5 to 25% by volume, and

another bearing to slide with respect to said bearing.